

present El Paso. Wright's "rocky ridges across river from Frontera" may correspond to present Cerro de Los Muleros (across Rio Grande from site of Frontera) and probably is a good approximation to the type of locality for *Psathyrotes scaposa* and, perhaps, other plants treated in *Plantae Wrightianae*.

"El Paso" in Wright's time (1849-1852) corresponds to present Cd. Juarez, Chihuahua. Gray inexplicably cited El Paso as being in southern New Mexico. Wooton (Bull. Torrey Bot. Club 33:561-566. 1906) discussed Wright's itinerary and, perhaps similarly confused, mistakenly indicated that El Paso was then in New Mexico, which he wrongly outlined as "a somewhat indefinite area extending from well down in what is now . . . Chihuahua . . . and including some of western Texas . . ."—THOMAS K. TODSEN, Box 1464, Las Cruces, New Mexico 88001.

REVIEW

Die Vegetation Osteuropas, Nord- und Zentralasiens. By HEINRICH WALTER. xxi+ 452, 363 figs. Gustav Fischer Verlag, Stuttgart. 1974. 149 DM (\$66.).

A plant ecologist acquainted with western North American vegetation who travels eastward from Europe may sense an increasing familiarity with the vegetation. Familiar plants occur in familiar associations and habitats. An American can recognize *Artemisia frigida* and *Linaria vulgaris* as he walks across an airport that might be at Jackson, Wyoming, but is actually at Omsk in Siberia, be shocked at what looks like an Eastern Siberian shrub of *Pinus pumila* out of place in the Wind River Mts. but is actually a young, snow-deformed *Pinus albicaulis*, recognize *Hordeum jubatum* as the ubiquitous weed in several Yakutian cities, remember the larch forests of the Bitterroot Mts. as he becomes acquainted with the beautiful eastern Siberian taiga with *Larix dahurica*, recognize in a patch of talus in the Cherski Mts. the same *Dryopteris fragrans* he saw in the same kind of site near Atlin Lake in British Columbia, see *Eurotia (Ceratooides)* hundreds of kilometers disjunct both in a steppe island within the boreal taiga at Kluane Lake in the Yukon or along the Lena River. Other boreal and arctic-alpine similarities are exceedingly numerous.

Walter's authoritative book describes this Eurasiatic vegetation. It is ecological and excellent. For those to whom the Cyrillic alphabet is a block, Walter makes readily available a very rich and detailed botanical literature.

The Introduction (21 pp.) describes the flora, methods of studying vegetation, the zonal kinds of vegetation, and Walter's climatic diagrams. Arctic desert and tundra (31 pp.), boreal coniferous forest (53 pp.), transitional mixed coniferous-deciduous forest (25 pp.), nemoral deciduous forest (30 pp.), steppe (68 pp.), semi-desert and desert (99 pp.), and mountain vegetation (Urals, Altai, Crimea, and Caucasus) (82 pp.) are graphically, vividly, perceptively discussed. Walter is a superb ecologist with worldwide field experience, and his treatment is most instructive.

He is an adherent of no one phytosociological method; he uses the results of a great variety of methods of study. He shows the similarity in results achieved when stands of vegetation, which may be points on a continuum of interacting ecological sequences or ecological types, are floristically described in different ways. Since kinds of vegetation are not documented in the book by stand-species matrices, the reader must accept the interpretations suggested, but the literature references are adequate for further search and understanding.

Comparisons with western North American vegetation are often explicit, as for the aspen parkland (p. 158 ff.). No American reader will fail to be stimulated, to question our present answers to our plant ecological questions, to expand his own horizons.

The book closes with a selected reference list and a fine index to plant species and subjects. It is richly illustrated with photographs, habit sketches of particular species, diagrams, and maps. Many maps lack a scale; some lack a latitude-longitude net. Unfortunately the price is out of this world.—JACK MAJOR, Department of Botany, University of California, Davis 95616.